

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/700, 816B  
Source: JFW/6  
Date Processed by STIC: 11/20/2006

***ENTERED***

**CRF Errors Edited by the STIC Systems Branch**

Serial Number: 10/700, 816B

CRF Edit Date: 11/20/2006  
Edited by: DA

— Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

— Corrected the SEQ ID NO. Sequence numbers edited were:

---

— Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

---

Deleted: invalid beginning/end-of-file text ; page numbers

— Inserted mandatory headings/numeric identifiers, specifically:

---

— Moved responses to same line as heading/numeric identifier, specifically:

---

— Other:

---

---

---



IFW16

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/700,816B

DATE: 11/20/2006

TIME: 10:20:18

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\11202006\J700816B.raw

3 <110> APPLICANT: XU, ZUOSHANG  
 4 ZAMORE, PHILIP D.  
 6 <120> TITLE OF INVENTION: ALLELE-SPECIFIC RNA INTERFERENCE  
 8 <130> FILE REFERENCE: UMY-038  
 10 <140> CURRENT APPLICATION NUMBER: 10/700,816B  
 11 <141> CURRENT FILING DATE: 2003-11-04  
 13 <150> PRIOR APPLICATION NUMBER: 60/423,507  
 14 <151> PRIOR FILING DATE: 2002-11-04  
 16 <150> PRIOR APPLICATION NUMBER: 60/488,283  
 17 <151> PRIOR FILING DATE: 2003-07-18  
 19 <160> NUMBER OF SEQ ID NOS: 19  
 21 <170> SOFTWARE: PatentIn Ver. 3.3  
 23 <210> SEQ ID NO: 1  
 24 <211> LENGTH: 21  
 25 <212> TYPE: DNA  
 26 <213> ORGANISM: Artificial Sequence  
 28 <220> FEATURE:  
 29 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule:  
 30 Synthetic oligonucleotide  
 32 <220> FEATURE:  
 33 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 34 oligonucleotide  
 36 <400> SEQUENCE: 1  
 37 uggagacuug cgcaaugugt t 21  
 40 <210> SEQ ID NO: 2  
 41 <211> LENGTH: 21  
 42 <212> TYPE: DNA  
 43 <213> ORGANISM: Artificial Sequence  
 45 <220> FEATURE:  
 46 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule:  
 47 Synthetic oligonucleotide  
 49 <220> FEATURE:  
 50 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
 51 oligonucleotide  
 53 <400> SEQUENCE: 2 21  
 54 cacauugcgc aagucuccat t  
 57 <210> SEQ ID NO: 3  
 58 <211> LENGTH: 21  
 59 <212> TYPE: DNA  
 60 <213> ORGANISM: Artificial Sequence  
 62 <220> FEATURE:  
 63 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule:  
 64 Synthetic oligonucleotide

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/700,816B

DATE: 11/20/2006

TIME: 10:20:18

Input Set : A:\pto.da.txt  
Output Set: N:\CRF4\11202006\J700816B.raw

66 <220> FEATURE:  
67 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
68 oligonucleotide  
70 <400> SEQUENCE: 3  
71 ggagacuugc gcaauggat t 21  
74 <210> SEQ ID NO: 4  
75 <211> LENGTH: 21  
76 <212> TYPE: DNA  
77 <213> ORGANISM: Artificial Sequence  
79 <220> FEATURE:  
80 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule:  
81 Synthetic oligonucleotide  
83 <220> FEATURE:  
84 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
85 oligonucleotide  
87 <400> SEQUENCE: 4  
88 ucacauugcg caagucuct t 21  
91 <210> SEQ ID NO: 5  
92 <211> LENGTH: 21  
93 <212> TYPE: DNA  
94 <213> ORGANISM: Artificial Sequence  
96 <220> FEATURE:  
97 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule:  
98 Synthetic oligonucleotide  
100 <220> FEATURE:  
101 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
102 oligonucleotide  
104 <400> SEQUENCE: 5  
105 gagacuugcg caaugugact t 21  
108 <210> SEQ ID NO: 6  
109 <211> LENGTH: 21  
110 <212> TYPE: DNA  
111 <213> ORGANISM: Artificial Sequence  
113 <220> FEATURE:  
114 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule:  
115 Synthetic oligonucleotide  
117 <220> FEATURE:  
118 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
119 oligonucleotide  
121 <400> SEQUENCE: 6  
122 gucacauugc gcaagucuct t 21  
125 <210> SEQ ID NO: 7  
126 <211> LENGTH: 48  
127 <212> TYPE: RNA  
128 <213> ORGANISM: Homo sapiens  
130 <400> SEQUENCE: 7  
131 gagaggcaug uuggagacuu gggcaaugg acugcugaca aagauggu 48  
134 <210> SEQ ID NO: 8  
135 <211> LENGTH: 48

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/700,816B

DATE: 11/20/2006

TIME: 10:20:18

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\11202006\J700816B.raw

136 <212> TYPE: RNA  
137 <213> ORGANISM: Homo sapiens  
139 <400> SEQUENCE: 8  
140 gagaggcaug uuggagacuu gcgc当地 augug acugcugaca aagauggu 48  
143 <210> SEQ ID NO: 9  
144 <211> LENGTH: 21  
145 <212> TYPE: DNA  
146 <213> ORGANISM: Artificial Sequence  
148 <220> FEATURE:  
149 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule:  
150 Synthetic oligonucleotide  
152 <220> FEATURE:  
153 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
154 oligonucleotide  
156 <400> SEQUENCE: 9  
157 gagacuuggg caauggact t 21  
160 <210> SEQ ID NO: 10  
161 <211> LENGTH: 21  
162 <212> TYPE: DNA  
163 <213> ORGANISM: Artificial Sequence  
165 <220> FEATURE:  
166 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule:  
167 Synthetic oligonucleotide  
169 <220> FEATURE:  
170 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
171 oligonucleotide  
173 <400> SEQUENCE: 10  
174 gucacauugc ccaagucuct t 21  
177 <210> SEQ ID NO: 11  
178 <211> LENGTH: 21  
179 <212> TYPE: DNA  
180 <213> ORGANISM: Artificial Sequence  
182 <220> FEATURE:  
183 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule:  
184 Synthetic oligonucleotide  
186 <220> FEATURE:  
187 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic  
188 oligonucleotide  
190 <400> SEQUENCE: 11  
191 ggagacuugg gcaauggat t 21  
194 <210> SEQ ID NO: 12  
195 <211> LENGTH: 21  
196 <212> TYPE: DNA  
197 <213> ORGANISM: Artificial Sequence  
199 <220> FEATURE:  
200 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule:  
201 Synthetic oligonucleotide  
203 <220> FEATURE:  
204 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/700,816B

DATE: 11/20/2006

TIME: 10:20:18

Input Set : A:\pto.da.txt  
 Output Set: N:\CRF4\11202006\J700816B.raw

```

205      oligonucleotide
207 <400> SEQUENCE: 12
208 ucacauugcc caagucucct t          21
211 <210> SEQ ID NO: 13
212 <211> LENGTH: 21
213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial Sequence
216 <220> FEATURE:
217 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
218     Synthetic oligonucleotide
220 <220> FEATURE:
221 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
222     oligonucleotide
224 <400> SEQUENCE: 13
225 uggagacuug ggcaaugugt t          21
228 <210> SEQ ID NO: 14
229 <211> LENGTH: 21
230 <212> TYPE: DNA
231 <213> ORGANISM: Artificial Sequence
233 <220> FEATURE:
234 <223> OTHER INFORMATION: Description of Combined DNA/RNA Molecule:
235     Synthetic oligonucleotide
237 <220> FEATURE:
238 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
239     oligonucleotide
241 <400> SEQUENCE: 14
242 cacauugccc aagucuccat t          21
245 <210> SEQ ID NO: 15
246 <211> LENGTH: 35
247 <212> TYPE: DNA
248 <213> ORGANISM: Homo sapiens
250 <400> SEQUENCE: 15
251 actgctgaca aagatggtgt ggccgatgtg tctat   35
254 <210> SEQ ID NO: 16
255 <211> LENGTH: 52
256 <212> TYPE: RNA
257 <213> ORGANISM: Artificial Sequence
259 <220> FEATURE:
260 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
261     oligonucleotide
263 <400> SEQUENCE: 16
264 gacaaagaug cuguggccga uaagcuuauc ggccacagca ucuuugucuu uu   52
267 <210> SEQ ID NO: 17
268 <211> LENGTH: 459
269 <212> TYPE: DNA
270 <213> ORGANISM: Homo sapiens
272 <400> SEQUENCE: 17
273 gcgacgaagg ccgtgtgcgt gctgaagggc gacggccag tgcagggcat catcaatttc 60
274 gagcagaagg aaagtaatgg accagtgaag gtgtgggaa gcattaaagg actgactgaa 120

```

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/700,816B

DATE: 11/20/2006  
TIME: 10:20:18

Input Set : A:\pto.da.txt  
Output Set: N:\CRF4\11202006\J700816B.raw

275 ggcctgcattt gattccatgt tcatacggtt ggagataata cagcaggctg taccagtgc 180  
 276 ggtcctcaact ttaatcctct atccagaaaa cacgtggc caaaggatga agagaggcat 240  
 277 gtggagact tggcaatgt gactgctgac aaagatggtg tggccatgt gtctattgaa 300  
 278 gattctgtga ttcactctc aggagaccat tgcatcattt gccgcacact ggtggtccat 360  
 279 gaaaaagcag atgacttggg caaaggtgga aatgaagaaa gtacaaagac agaaaacgct 420  
 280 ggaagtcgtt tggcttgtgg tgtaattggg atcgcccaa 459  
 283 <210> SEQ ID NO: 18  
 284 <211> LENGTH: 153  
 285 <212> TYPE: PRT  
 286 <213> ORGANISM: Homo sapiens  
 288 <400> SEQUENCE: 18  
 289 Ala Thr Lys Ala Val Cys Val Leu Lys Gly Asp Gly Pro Val Gln Gly  
 290 1 5 10 15  
 292 Ile Ile Asn Phe Glu Gln Lys Glu Ser Asn Gly Pro Val Lys Val Trp  
 293 20 25 30  
 295 Gly Ser Ile Lys Gly Leu Thr Glu Gly Leu His Gly Phe His Val His  
 296 35 40 45  
 298 Glu Phe Gly Asp Asn Thr Ala Gly Cys Thr Ser Ala Gly Pro His Phe  
 299 50 55 60  
 301 Asn Pro Leu Ser Arg Lys His Gly Gly Pro Lys Asp Glu Glu Arg His  
 302 65 70 75 80  
 304 Val Gly Asp Leu Gly Asn Val Thr Ala Asp Lys Asp Gly Val Ala Asp  
 305 85 90 95  
 307 Val Ser Ile Glu Asp Ser Val Ile Ser Leu Ser Gly Asp His Cys Ile  
 308 100 105 110  
 310 Ile Gly Arg Thr Leu Val Val His Glu Lys Ala Asp Asp Leu Gly Lys  
 311 115 120 125  
 313 Gly Gly Asn Glu Glu Ser Thr Lys Thr Gly Asn Ala Gly Ser Arg Leu  
 314 130 135 140  
 316 Ala Cys Gly Val Ile Gly Ile Ala Gln  
 317 145 150  
 320 <210> SEQ ID NO: 19  
 321 <211> LENGTH: 2288  
 322 <212> TYPE: DNA  
 323 <213> ORGANISM: Homo sapiens  
 325 <400> SEQUENCE: 19  
 326 gtaccctgtt tacatcattt tgccattttc gcgtactgca accggcgccc cacggcgta 60  
 327 aaagaagggtt gttttctcca cagtttgcgg gtttgcgcg tttcccggtt gcggggcggtt 120  
 328 gggagtctcc ggcgcacgcg gccccttggc ccgcggcgtt cattcccgcc cactcgccac 180  
 329 ccgaggctgc cgcaagggggc gggctgagcg cgtgcgaggc cattgggtttt gggccagagt 240  
 330 gggcgaggcg cggaggcttg gcctataaaag tagtcgcggg gacgggggtgc tgggttgcgt 300  
 331 cgtagtctcc tgcaggcttg gggtttccgt tgcagtccctc ggaaccagga cctcggcggt 360  
 332 gccttagcgag ttatggcgac gaaggccgtg tgcgtgtca agggcgacgg cccagtgcag 420  
 333 ggcatcatca atttcgagca gaaggcaagg gctgggaccg ggaggcttgtt gttgcgaggc 480  
 334 cgctcccgac cgcgtcgcc ccccgccgacc ctggcatgg acgggtcgcc cgccagggtt 540  
 335 agagcagttt agcagcttc tggagggttca ctggcttagaa atgggtcagc ctgggattgc 600  
 336 atggacggat tttccactc ccaagtctgg ctgtttta cttcaactgtg agggtaaaag 660  
 337 gtaaatcagc tggtttcttt gttcagaaac tctctccaac tttgcacttt tcttaaagga 720  
 338 aagtaatgga ccagtgaagg tgtggggaaag cattaaagga ctgactgaag gcctgcattgg 780

**VERIFICATION SUMMARY**  
PATENT APPLICATION: US/10/700,816B

DATE: 11/20/2006  
TIME: 10:20:19

Input Set : A:\pto.da.txt  
Output Set: N:\CRF4\11202006\J700816B.raw

**Raw Sequence Listing before editing  
(for reference only)**



IFW16

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/700,816B**

**DATE: 11/09/2006**  
**TIME: 09:37:13**

**Input Set : A:\SEQUENCE LISTING.txt**  
**Output Set: N:\CRF4\11092006\J700816B.raw**

3 <110> APPLICANT: XU, ZUOSHANG  
 4 ZAMORE, PHILIP D.  
 6 <120> TITLE OF INVENTION: ALLELE-SPECIFIC RNA INTERFERENCE  
 8 <130> FILE REFERENCE: UMY-038  
 10 <140> CURRENT APPLICATION NUMBER: 10/700,816B  
 11 <141> CURRENT FILING DATE: 2003-11-04  
 13 <150> PRIOR APPLICATION NUMBER: 60/423,507  
 14 <151> PRIOR FILING DATE: 2002-11-04  
 16 <150> PRIOR APPLICATION NUMBER: 60/488,283  
 17 <151> PRIOR FILING DATE: 2003-07-18  
 19 <160> NUMBER OF SEQ ID NOS: 19  
 21 <170> SOFTWARE: PatentIn Ver. 3.3

Does Not Comply  
Corrected Diskette Needed

(Prg-2)

#### ERRORED SEQUENCES

320 <210> SEQ ID NO: 19  
 321 <211> LENGTH: 2288  
 322 <212> TYPE: DNA  
 323 <213> ORGANISM: Homo sapiens  
 325 <400> SEQUENCE: 19  
 326 gtaccctgtt tacatcattt tgccattttc gcgtactgca accggcgccc cacggccgtga 60  
 327 aaagaagggtt gtttctcca cagtttcggg gttctggacg tttcccggtt gcggggcgccc 120  
 328 gggagtctcc ggcgcacgcg gccccttggc cccgcggcgtt cattcccgcc cactcgccgac 180  
 329 ccgaggctgc cgcagggggc gggctgagcg cgtgcgaggc cattgggttg gggccagagt 240  
 330 gggcgaggcg cggaggctcg gcctataaaag tagtcgcggc gacgggggtgc tgggttgcgt 300  
 331 cgttgtctcc tgcaggctcg gggttccgt tgcagtctc ggaaccagga cctcgccgtg 360  
 332 gcctagcggat ttatggcgac gaaggccgtg tgcgtgctga agggcgacgg cccagtgcag 420  
 333 ggcattcatca atttcgagca gaaggcaagg gctgggaccg ggaggcttgcgtt gttgcgaggc 480  
 334 cgctcccgac ccgctcgtcc ccccgccgacc ctggcatgg acgggtcgcc cgccagggtc 540  
 335 agagcgtta agcagcttc tggaggttca ctggctagaa agtggtcagc ctgggattgc 600  
 336 atggacggat tttccactc ccaagtctgg ctgcttttta ctgcactgtg aggggtaaag 660  
 337 gtaaatcagc tgggttcttt gttcagaaac tctctccaaac tttgcacttt tcttaaagga 720  
 338 aagtaatggc ccagtgaagg tggggggaaat cattaaagga ctgactgaag gcctgcattgg 780  
 339 attccatgtt catgagtttgc gagataatac agcaggtggg tcataatttgcgtttttt 840  
 340 ctcttctta taaataggct gtaccagtgc aggtcctcac ttaatcctc tatccagaaa 900  
 341 acacgggtggg ccaaaggatg aagagaggta acaagatgct taactcttgcgtt aatcaatggc 960  
 342 gatacgtttc tggagttcat atggtataact acttgtaat atgtgcctaa gataattccg 1020  
 343 tgggtttccccc acctttgttt tgaaacttgc tgactcatgt gaaaccctgc tcccaaattgc 1080  
 344 tggaaatgtttt ttacttccgt ggcttaaagg aattgacaaa tgggcactta aaacgatttg 1140  
 345 gttttgttagc atttgatttgc atatagaact aataacaatgtt ccaaaggggaa actaataacag 1200  
 346 gaaatgttca tgaacagtac tggcaaccac tagaaaaatc aatcatcatt tgatgctttt 1260  
 347 catataggca tggagac ttggcaatgc tgactgctga caaagatggt gtggccgatg 1320

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/700,816B

DATE: 11/09/2006  
TIME: 09:37:13

Input Set : A:\SEQUENCE LISTING.txt  
Output Set: N:\CRF4\11092006\J700816B.raw

348 tgtctattga agattctgtg atctcaactc caggagacca ttgcattcatt ggcgcacac 1380  
349 tggggtaag ttttcataaa ggatatgcat aaaacttctt ctaacagtagt acgtatgtat 1440  
350 cttaactttt gatttttagt cgccattt aagatccaga taaactgtgt ttctgtttt 1500  
351 aaactactaa atatttagtat atctctctac taggattaat gttattttc taatattatg 1560  
352 agttcttaa acatctttt ggtattgtg ggaggaggta gtgattactt gacagccaa 1620  
353 agttatcttc ttaaaatttt ttacaggtcc atgaaaaagc agatgacttg ggcaaagggtg 1680  
354 gaaatgaaga aagtacaaag acaggaaacg ctggaaatcg tttggcttgg ggttaattg 1740  
355 ggatcgccca ataaacattc cttggatgt agtctgaggc cccttaactc atctgttac 1800  
356 ctgctagctg tagaaatgtt tcctgataaa cattaaacac tctaatttta aaagtgtat 1860  
357 tgtgtgactt ttccagagtt gctttaaagt acctgtatg agaaactgtat ttatgtatcac 1920  
358 ttggaaagatt tgtatagttt tataaaactc agttaaaatg tctgtttcaa tgacctgtat 1980  
359 ttgccagac ttaaatcaca gatgggtatt aaacttgcata gaatttctt gtcattcaag 2040  
360 cctgtgaata aaaaccctgt atggcactta ttatgaggct attaaaagaa tccaaattca 2100  
361 aactaaattt gctctgatac ttatattat aaacagctt agtggaaacag atttagtaat 2160  
362 actaacatgt atagcatttt atttgaaag tgtttgaga ccatcaaaat gcatacttta 2220  
363 aaacagcagg ttcttttagct aaaactaaca caactctgct tagacaaataa ggctgtcctt 2280  
364 tgaagctt 2288

E--> 367 my-038  
E--> 372 1

↑ deleted

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/700,816B

DATE: 11/09/2006

TIME: 09:37:14

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF4\11092006\J700816B.raw

L:367 M:254 E: No. of Bases conflict, LENGTH:Input:-38 Counted:2292 SEQ:19

L:367 M:112 C: (48) String data converted to lower case,

M:254 Repeated in SeqNo=19

L:372 M:252 E: No. of Seq. differs, <211> LENGTH:Input:2288 Found:2292 SEQ:19